## Interior Columbia TRT meeting March 14 – 15, 2006 Boise, ID

Members in attendance: Michelle McClure, Rich Carmichael, Fred Utter, Peter Hassemer, Charley Petrosky, Howard Schaller, Casey Baldwin, Tom Cooney, Phil Howell Non-members: Kim Engie

- I. Agenda and to-do list: Updates to Gap Analysis, Snake River Steelhead, and modeling. Discuss SSD update (wed.), Remand and Recovery Planning, policy-level reactions to the TRT.
  - A. Brief discussion of business contract and budgeting details. Meet with Russ Thurow, others on Thursday in Boise. Some want a brief overview of technical aspects of recent TRT work (Gap and Viability Analyses)
  - B. Policy meetings and reactions: Discussion of understandings of the definition of "maintained". It is important to make sure there is no communication gap, as the region moves into writing and implementing recovery plans.
    - i. Points: there is a lot of local support for recovering all populations if possible. There is a body of people with TRT knowledge absent, that could assist people, e.g., like a counterpart to the Shared Strategy in Puget Sound.
    - ii. Mcclure and Lohn: going to D.C. to present goals to CEQ and Salmon Policy Team
    - iii. Update on the workgroups on Hydropower (Howard and Charlie): looking at potential scenarios to change hydropower patterns short of breaching, distribution of delayed mortality among the 4 H's. Discussion of a request for an extension.

## II. What should the TRT focus on?

- A. Be ready for review process Recovery Plans are due by June/July, they must then be reviewed and finished by December.
- B. Quantitative Limiting Factors Analysis Next step is to take proposed actions and turn them into a quantitative assessment of habitat reactions.
  - i. Mid and Lower Columbia populations will have EDT and population level analysis conducted (Rich). Points: How to direct the research, and how to link it to the Shiraz analysis in Washington.
  - ii. Another contract to do the same looking at the Upper Columbia region (Tom). Points: have him write the synthesis, or do modeling?
  - iii. Points for modeling: translate a proposed action into potential outputs, in a geographic area. Important aspects: timeline of response and implementation, modeling rates of degradation and rates of improvement simultaneously.
    - 1. Actions in three categories: 1) those done, with no effects yet to be seen, 2) those planned currently, 3) those not planned but that should be taken.
  - iv. Look at the details of implementation, impacts on particular life-stages and viability characteristics.
  - v. There is interest in doing the same for Grande Ronde populations as well
- C. Must also address Limiting Factors in a qualitative way first; there are habitat restoration actions being discussed that would benefit from some limiting factors

input. Ensuring viability requires aggressive action in the next 10-15 years, perhaps doing more rather than less to overcome uncertainty.

- III. Gap Analysis: agreement that we should describe not just A/P but SS/D gaps by population.
  - A. Modeling Handouts
    - i. Modeling handout by R. Zabel Status Comparisons: scenarios taken forward. "Status" = years that correspond to the years the A/P assessment is based on. "Historical" does not include current and BiOp hydro scenarios.
    - ii. Handout "Required Survival Rate Changes to Meet TRT Viability Criteria" (Tom). Revised text from the previous gaps analysis document. Intention: General introduction to concept of A/P gaps, proposed terminology. Mention there should also be a SS/D gap assessment. All tables use the 10-yr geo-mean.
      - 1. Observed gaps base period date, last 10-yr geo-mean
      - 2. Reduced gaps adjusting the observed gaps for apparent improvements given hydropower improvements (future returns must be used to evaluate whether these improvements have been realized)
      - 3. Terminology changes: 1) change "reduced gaps" to "future scenarios" or "estimated gap scenarios" (use the word scenarios).2) change "observed gaps" into "current observed gaps"
      - 4. Suggestions for table format: two tables, all 3 ocean scenarios
        - a. 1 table with observed base gaps. 3 more with the differing risk percentages. Separates out the potential adjustments with the observed gaps.
        - b. Mid C tables check Walla Walla numbers
        - c. Sidenote intrinsic potential redone for Joseph Creek a combination of canyon and low gradient there.
    - iii. More Comments: match up terms in Zabel and the gaps analysis
      - 1. Drop the "Recent Ocean" term in Zabel modeling too similar to other categories in years analyzed.
      - 2. Replace with "Current Ocean"
      - 3. Leave a placeholder for variable d.
    - iv. Clearly differentiate between observed and observed-modeled numbers.
    - v. Gap analysis in Snake R steelhead Tom will work on reformatting gaps to risk-curve-specific tables. Some discussion of A- and B-run steelhead (B-runs generally do worse), and certain populations with high hatchery influence. Are the numbers of hatchery spawners returning to those populations known?
  - B. Overview of graphs of gap analysis stacked bars. Discussion on other graph options.
    - i. Suggestion: walk through all Current Status Assessments quickly, double-checking that all numbers are correct/consistent.
  - C. Add some text highlighting essential populations in each MPG? Intro section: Put current status assessments into context. Make scenarios more clear, in a neutral way.
  - D. Mcclure will write up what there is so far, with graphs. Petrosky will circulate Byrne report, with some info on smolt age for some populations.
  - IV. Spatial Structure/Diversity:

- A. Work on boiler-plate language for status assessments
- B. Review of certain rules
  - i. Re: 1 MSA in an intermediate population. this situation leads to an M being the lowest risk a population can score, as goal A drives the SS/D overall score.
    - 1. Factor A.1.c only applicable with at least 3 MSAs. Partly troubling because Wenaha and Secesh are intermediate populations, vs. low populations
    - 2. Does one make case-specific rules for certain populations, or change the old rating rules? Important to not punish populations for having good, continuous spawning vs. linear, spotty spawning.
    - 3. Decision: make exception, which is: one can have 2 or more MSAs in a linear configuration (if there is enough habitat)
    - 4. Reminder: Introductory language must be extremely clear about these being guidelines, and the criteria for exceptions (clear justification, historical evidence, etc.) Perhaps take either the Secesh or Wenaha and step through it as an example.
  - ii. Ecoregion Rule change wording to 67%.
  - iii. Factor B.1.a Discussion: does a loss of late-season spawners represent a loss in life-history strategy? This deals with run timing.
  - iv. Factor B.1.b in the absence of information, different members chose different ratings of this metric differently for certain populations. Discussion: how change in arrival timing/travel through the mainstem Columbia R. affects phenotype. There is now a truncation of migration timing, however in Secesh, outmigration from the Secesh is roughly the same as historically. If there are pressures on size selection and differential mortality, we may not measure at sufficient scales at this time to detect them. A change in phenotypic variation would be, evidence for a change in the distribution and central tendency of phenotypic variation in a population.
    - 1. options: use Low unless there is population-specific evidence (measured or inferred) for a different rating.
    - 2. Decision: Score on the basis of data; if there is no data then infer a score from the rest of the B factors.
  - v. Factor B.1.c Genetics. Discussion of the ratings for the Imnaha and SF Salmon genetics ratings. There is similarity in genetic signals of Imnaha and other hatchery stock. However, yearly tagging data also indicates practically no straying into or out of the Imnaha.